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ABSTRACT

This report examines the impact of the Saturday School (a school and home learning program for 4-year-olds in a large suburban school district) on the following four groups: (1) students with learning disabilities, (2) students identified as either "mentally retarded" or of "low intellectual functioning", (3) students with emotional problems, and (4) parents of students with emotional problems. Standardized test results and ratings, administered in a pre-post design, constitute the majority of the data presented for each of the three years of program operation. Followup data on the lasting effects of the program into the kindergarten year are also presented for students with emotional problems. It is concluded that the program has had a significant impact on the students identified as having some kind of problem affecting their learning, as well as on the parents of emotionally disturbed students. Data tables are included. (ED)

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The Child with Special Problems

An Evaluation Report

PARENT-CHILD EARLY EDUCATION PROGRAM
Ferguson-Florissant School District

PS 007918

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PARENT-CHILD EARLY EDUCATION PROGRAM
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INTRODUCTION

The following data details the impact of the Saturday School Program on the following four groups:

- Students with learning disabilities
- Students identified as either "Mentally Retarded" or "Low Intellectual Functioning"
- Students with emotional problems
- Parents of students with emotional problems.

Standardized test results and ratings, administered in a pre-post design, constitute the majority of data presented. These data are presented for each of the three years of program operation. Follow-up data on the lasting effects of the program into the kindergarten year are also presented for students with emotional problems

STUDENTS WITH LEARNING DISABILITIES

TESTING INSTRUMENTS

During each of the three project years, all students suspected of having learning disabilities were tested with a battery which included the Beery Visual-Motor Integration Test and the Goodenough-Harris Drawing Test. During the first two program years, the battery also included the Peabody Picture Vocabulary Test, the Oseretsky Motor Proficiency Test and the Sievers Differential Language Facility Test. During the final program year, the ITPA was substituted for these latter three tests. It was thought that the ITPA would enable the project staff to determine the processing kinds of skills: reception, comprehension and expression, as well as the modality strengths and weaknesses of individuals. Essentially, this one instrument would provide more information in a better organized manner than did the separate instruments used during the first two years of the program operation.

Those pupils diagnosed to be truly learning disabled by the Consultant Specialist at the beginning of the year were retested using the same diagnostic battery at the end of each program year (six months later). A summary of the results of these tests is given in Table 1.

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Table 1

Results of Further Screening and Final Testing of Pupils Identified as Being Learning Disabled

Name of Test	Project Year		N	Mean*	Standard Deviation	t	p	Range of Scores
Beery	1st	Pre	18	50.33	8.85	5.78	<.01	33-66
		Post	18	61.77	12.67			36-86
	2nd	Pre	18	41.78	8.04	8.10	<.01	34-57
		Post	18	60.50	5.75			49-72
	3rd	Pre	25	45.40	9.81	6.55	<.01	33-72
		Post	25	57.00	7.60			38-66
Goodenough-Harris	1st	Pre	17	75.47	9.87	3.64	<.01	58-92
		Post	17	93.82	16.24			70-137
	2nd	Pre	17	82.71	14.92	2.62	<.02	62-113
		Post	17	92.12	9.23			77-113
	3rd	Pre	24	76.92	12.88	3.27	<.01	55-96
		Post	24	86.38	11.80			59-111
Peabody	1st	Pre	18	58.11	13.73	4.38	<.01	38-94
		Post	18	76.72	15.27			39-101
	2nd	Pre	18	58.89	9.11	5.97	<.01	44-76
		Post	18	70.83	10.99			55-94
Oseretsky	1st	Pre	13	59.54	7.83	7.59	<.01	47-75
		Post	13	79.77	7.11			68-91
	2nd	Pre	17	62.12	7.32	3.79	<.01	52-79
		Post	17	70.62	5.78			64-88
Sievers	1st	Pre	16	46.39	6.97	12.26	<.01	35-56
		Post	18	74.72	9.22			41-79
	2nd	Pre	16	61.28	11.20	6.65	<.01	46-79
		Post	16	78.17	2.18			72-79

(continued)

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Table 1 (continued)

Name of Test	Project Year		N	Mean*	Standard Deviation	t	p	Range of Scores
ITPA								
Auditory Recognition	3rd	Pre	24	49.92	7.01	2.79	<.02	35-64
		Post	24	57.79	11.95			42-103
Visual Recognition	3rd	Pre	24	55.83	12.20	7.04	<.01	25-75
		Post	24	69.92	9.46			55-93
Auditory Association	3rd	Pre	24	51.08	8.28	4.54	<.01	36-68
		Post	24	57.25	7.18			43-65
Visual Association	3rd	Pre	24	51.17	13.01	4.25	<.01	28-91
		Post	24	62.17	8.75			38-75
Verbal Expression	3rd	Pre	24	48.71	11.72	9.21	<.01	24-76
		Post	24	68.79	11.34			40-94
Motor Expression	3rd	Pre	24	55.08	16.39	6.00	<.01	24-86
		Post	24	78.29	20.03			42-110
Auditory Closure	3rd	Pre	24	46.62	9.73	6.03	<.01	26-66
		Post	24	56.75	6.69			43-66
Visual Closure	3rd	Pre	24	52.71	13.96	11.50	<.01	26-90
		Post	24	64.21	15.46			35-105
Auditory Memory	3rd	Pre	24	42.46	9.58	8.58	<.01	26-66
		Post	24	51.04	15.06			26-91
Visual Memory	3rd	Pre	24	54.46	16.12	12.79	<.01	34-94
		Post	24	67.25	17.62			46-125
Total (PLA)	3rd	Pre	24	50.58	7.32	12.04	<.01	33-65
		Post	24	62.62	7.10			47-76

*Results of tests are given in months with the exception of Goodenough-Harris which yields a standard score with a mean of 100 and a standard deviation of 15.

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PRE AND POST TESTS COMPARED

The results of the comparisons made between the two administrations of the tests showed that

> learning-disabled pupils had significantly higher average scores on ALL tests at the end of each of the program years than they had had at the beginning.

GOALS. . .GAINS

The major goal for the six-month period between test administrations was: an eight-month gain in test scores on those tests which yielded age norms. The results follow:

Perceptual Age

During the six months between administrations of the Beery Test of Visual-Motor Integration, learning disabled students averaged a gain of:

- 4 months during the first program year
- 19 months during the second year
- 11 months during the third year.

With respect to the program goal of an eight-month gain, the following per cent met or exceeded the expectation made for them:

- 61% of first year pupils
- 83% of second year pupils
- 68% of third year pupils

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Mental Age

During the six months between administrations of the Peabody Picture Vocabulary Test, students averaged a gain of:

- 18 months during the first program year
- 12 months during the second year

Of all learning disabled pupils in both project years, two thirds attained or exceeded the goal of an eight-month gain in mental age.

Language Age

During the six months between administrations of the Sievers Differential Language Facility Test, students averaged:

- 28 months during the first program year
- 17 months during the second year

Over 91% of all learning disabled pupils from both program years met or exceeded the goal of an eight-month gain in language age.

Perceptual-Language Age

- Between 38% and 92% of the third program year pupils met or exceeded the eight-month gain on the various 10 subtests of the ITPA.
- On the total ITPA test scores, 58% met or exceeded the goal set for them.

Motor Age

During the six months between administration of the Oseretsky Motor Proficiency Test, students averaged a gain of:

. 20 months during the first project year

. 8½ months during the second program year

More than 75% of all learning disabled pupils from both program years met or exceeded the goal of an eight-month gain in motor age.

Goodenough-Harris

Because the norms of this test are expressed in standard scores with a mean of 100 and a standard deviation of 15 points, rather than in age units, a reasonable expectation of gain for these pupils was agreed upon to be one-third of a standard deviation or five points.

The following per cent of students increased their scores by more than five points:

. All pupils (100%) in the first program year

. 65% of the second year pupils

. 54% of the third year pupils.

In summary, it was found that in most instances the vast majority of pupils from the three program years identified as learning disabled met or exceeded the goal set for them. That is, they gained at least eight months in test scores during the six months between test administrations. It was also found that, *as a group, pupils with learning disabilities significantly increased their scores on every test given them.*

2 STUDENTS WITH LOW INTELLECTUAL FUNCTIONING

TESTING INSTRUMENTS

During each of the three program years, a certain proportion of students were referred for further testing because of apparent low intellectual functioning or mental retardation. These students were tested using the Stanford-Binet Intelligence Test and the Vineland Social Maturity Scales.

Based on this screening, pupils identified as functioning at low intellectual levels were given special programs---including home teaching by specialists for some, or special programming by specialists carried out by the home-school teacher.

They were retested at the end of each program year using the same two tests. The results of these students on initial and final testing are summarized in Table 2.

Table 2

A Summary of Further Screening and Final Testing of Pupils Identified to be Mentally Retarded

Test	Project Year	N		Mean	Standard Deviation	t	p	Range of Scores
Stanford-Binet Intelligence Test (Mental Age)	First	8	Initial	41.625	4.68	2.94	<.05	32-46
			Final	53.75	3.87			48-60
	Second	14	Initial	52.86	6.82	5.03	<.01	40-64
			Final	60.86	6.62			52-74
	Third	12	Initial	42.83	9.81	6.99	<.01	25-55
			Final	52.42	10.96			31-67
Vineland Social Maturity Scale (Social Age)	First	8	Initial	51.00	8.48	2.76	<.05	42-62
			Final	60.29	8.38			46-70
	Second	15	Initial	51.87	13.37	5.42	<.01	24-76
			Final	66.07	11.08			34-78
	Third	13	Initial	52.92	15.66	3.33	<.01	26-87
			Final	60.69	17.30			25-84

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PRE AND POST TESTS COMPARED

It can be seen in the table that those students identified as functioning at low intellectual levels showed significant gains in their average scores on both instruments, in all three program years.

- The average gain in mental age, as measured by the Stanford-Binet Intelligence Test, was nearly 10 months for all three program years (the range of the average gain was from eight to more than 12 months) during the six months between test administrations.

- The average gain in social age, as measured by the Vineland Social Maturity Scale was nearly 10.5 months for all three project years (the range was from 7.75 months to more than 14 months' gain) during the six months between testings.

While there were no specific program goals set for these students, *it is apparent from the results that the Saturday School Program had a significant impact upon pupils found to be initially functioning at low intellectual levels.*

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3 PUPILS WITH EMOTIONAL PROBLEMS

ASSESSMENT BY PARENTS

Comparisons were made between parents' ratings of their child's symptomology at the time of entry into the first and second Saturday School Program years and at the time of entry into kindergarten on 16 items of the Glidewell Scale. The results of these comparisons are given in Table 3.

RATING SCALE

All parents rated their children on 16 items of the Glidewell Scale prior to entry into Saturday School and, one year later, prior to entry into kindergarten. The 16 three-point scales measure the frequency of a variety of symptoms observed by parents.

The two sets of ratings of pupils identified during the first two project years as having emotional problems were compared. The results of these comparisons are given in Table 3.

PRE AND POST RATINGS COMPARED

It may be seen in the table that Saturday School students identified as having emotional problems were rated by their parents as having significantly lower symptomology upon entry into kindergarten than had been the case upon entry into the Saturday School Program one year earlier.

- On at least 13 of the 16 three-point scales, the means were statistically significantly lower upon entry into kindergarten.
- There were also fewer pupils rated as displaying above average symptomology (defined as a rating of "1" or "2" on each three-point scale) than had been the case upon entry into the four year old program.

Table 3

Summary of Results Comparing Parents' Ratings of the Glidewell Items for PCEE Pupils Identified as Having Emotional Problems at the Time of Entry Into the PCEE Program and Upon Entry Into Kindergarten*

Child has trouble with:	Project Year		Means**	Standard Deviation	t	p	Proportion Rated Above Average Symptomology*** N	%
1. Eating (too much or too little)	First	S.S.	.90	.72	-5.22	<.01	161	68
		Kdg.	.62	.65			120	54
	Second	S.S.	.78	.65	-4.80	<.01	89	65
		KDG.	.51	.66			57	42
2. Sleeping (too much or too little)	First	S.S.	.46	.62	-4.74	<.01	92	39
		Kdg.	.26	.49			52	24
	Second	S.S.	.48	.63	-3.06	<.01	54	41
		Kdg.	.29	.52			35	26
3. Stomach Irregularities	First	S.S.	.29	.50	<1	n.s.	64	27
		Kdg.	.27	.48			56	25
	Second	S.S.	.36	.54	-1.87	n.s.	44	33
		Kdg.	.27	.48			34	26
4. Getting along with children	First	S.S.	1.09	.70	-6.39	<.01	187	79
		Kdg.	.70	.69			130	59
	Second	S.S.	.98	.65	-3.01	<.01	105	78
		Kdg.	.74	.63			86	64
5. Getting along with adults	First	S.S.	1.00	.77	-7.46	<.01	165	70
		Kdg.	.53	.76			89	40
	Second	S.S.	.92	.73	-4.39	<.01	92	71
		Kdg.	.56	.71			58	44
6. Unusual fears	First	S.S.	.61	.62	-4.79	<.01	127	54
		Kdg.	.36	.65			71	32
	Second	S.S.	.56	.60	-4.47	<.01	67	50
		Kdg.	.29	.49			36	27
7. Nervousness	First	S.S.	.45	.55	-2.23	<.05	100	42
		Kdg.	.36	.53			73	33
	Second	S.S.	.57	.65	-2.14	<.05	64	48
		Kdg.	.44	.59			52	39
8. Thumbsucking	First	S.S.	.50	.81	-3.11	<.01	69	29
		Kdg.	.40	.73			56	25
	Second	S.S.	.55	.87	-4.19	<.01	40	30
		Kdg.	.37	.68			35	26

(continued)

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Table 3 (continued)

Child has trouble with:	Project Year		Means**	Standard Deviation	t	p	Proportion Rated Above Average Symptomology*** N	%
9. Overactivity	First	S.S.	.68	.74	-5.50	<.01	121	51
		Kdg.	.43	.63			81	36
	Second	S.S.	.73	.79	-4.30	<.01	70	52
		Kdg.	.47	.68			49	37
10. Daydreaming	First	S.S.	.45	.53	-2.42	<.05	105	44
		Kdg.	.36	.51			78	35
	Second	S.S.	.39	.51	-1.63	n.s.	51	38
		Kdg.	.32	.48			41	31
11. Temper Tantrums	First	S.S.	.86	.56	-5.88	<.01	176	74
		Kdg.	.62	.56			151	68
	Second	S.S.	.87	.62	-5.36	<.01	100	74
		Kdg.	.56	.55			64	47
12. Crying	First	S.S.	.96	.58	-4.36	<.01	198	84
		Kdg.	.79	.57			160	71
	Second	S.S.	.88	.60	-2.75	<.01	101	75
		Kdg.	.72	.53			92	69
13. Lying	First	S.S.	.62	.53	-2.94	<.01	140	59
		Kdg.	.51	.54			110	49
	Second	S.S.	.59	.52	<1	n.s.	77	57
		Kdg.	.56	.56			71	53
14. Tearing or breaking things	First	S.S.	.62	.52	-7.94	<.01	140	59
		Kdg.	.31	.47			68	30
	Second	S.S.	.54	.58	-3.56	<.01	67	50
		Kdg.	.35	.51			46	34
15. Wetting	First	S.S.	.55	.73	-4.23	<.01	96	40
		Kdg.	.37	.64			63	28
	Second	S.S.	.76	.58	-4.95	<.01	63	47
		Kdg.	.64	.35			40	30
16. Speech	First	S.S.	.54	.69	-7.81	<.01	98	41
		Kdg.	.23	.53			41	18
	Second	S.S.	.56	.70	-4.17	<.01	58	44
		Kdg.	.29	.56			32	24

*There were 223 emotionally handicapped pupils rated twice by their parents from the first project year and 136 from the second project year.

**Scores represent a continuum from 0 - 2, with 0 being the positive end of the scale.

***Above average symptomology was defined as a rating from "1" or "2" on each three-point scale.

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GOALS AND GAINS

The program goal for students identified as having emotional problems was that each of these students would improve his ratings by at least one step on 25% of the items on which he had been initially judged to have above average symptomology. Analyses of these changes were made for those pupils in both program years and summaries are given below by year.

First Program Year

Of the 220 pupils rated twice on the Glidewell items:

- 82% (182) exceeded the criterion set for them
- 3% (5) met the criterion exactly
- 12% (27) changed in a positive direction on some items, but not enough to reach the criterion of 25% of the items
- 3% (6) showed no changes in their ratings.

Of the 182 pupils who had exceeded the criterion,

- 77 were rated more positively on between 26% and 50% of the items,
- 64 attained lower ratings on 51% to 75% of those items, and
- 41 decreased their ratings on 76% to 100% of the scales on which they were initially judged to have above average symptomology.

Altogether, 85% (187) of the 220 Saturday School students identified as having emotional problems during the first project year met or exceeded the program goal.

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Second Program Year

Of the 133 students rated twice:

- 80% (107) exceeded the criterion set for them
- 5% (6) met the criterion exactly
- 11% (14) changed in a positive direction on some items, but not enough to reach the criterion of 25% of the items
- 5% (6) showed no changes in their ratings.

Of the 107 students who exceeded the criterion,

- 46 were rated more positively on between 26% and 50% of the items
- 33 attained lower ratings on 51% to 75% of the items, and
- 28 decreased their ratings on 76% to 100% of the scales on which they were initially judged to have above average symptomology.

Altogether, 85% (113) of the 133 Saturday School students identified as having emotional problems during the second program year met or exceeded the program's goal.

The results obtained from the first two program years are very similar. In neither year was the program's goal of 100% attainment met, but it appears to have been well approximated.

In summary, from the time of entry into the Saturday School Program to the time of entry into kindergarten one year later, Satruday School students identified as having emotional problems *substantially improved in the areas of interpersonal problems, psychophysical symptoms, and behaviors as assessed by their parents.*

In addition, the vast majority (85%) of Saturday School students judged to have above average symptomology met or exceeded the program's goal for them of a one-step change in a more positive direction on at least 25% of the 16 items.

ASSESSMENT BY TEACHERS DURING THE PROGRAM YEAR

RATING SCALE

To provide an additional method of detection, students suspected of having emotional problems on the basis of an analysis of parent ratings on the Glidewell items were also rated by their teachers on the items of the "Nursery School Adjustment Scale" at the beginning of each program year. Students who were then identified as truly having emotional problems were again rated on the "Nursery School Adjustment Scale" at the end of each program year.

A summary of the comparisons between initial and final ratings received by students identified as having emotional problems is given in Table 4.

PRE AND POST RATINGS COMPARED

Table 4 shows that students were rated at the end of each program year as having

- improved their relationships with both their peers and their teachers
- being more creative in their use of individual activities
- showing fewer signs of behavioral immaturity and eccentricity compared to their ratings at the beginning of each project year.

These findings may be inferred from both the statistically significant paired observation t-test results and the differences in the proportions of pupils found to be deficient (rated as "2" or less) on the five-point scales at the beginning and end of each program year.

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Table 4

Summary of Initial and Final Teacher Ratings on Items of the "Nursery School Adjustment Scale" for Pupils Identified as Having Emotional Problems

	Project Year		N	Mean	Standard Deviation	t	p	Deficient* N	Deficient* %
1. Relationships with peers in Nursery School	First	Initial	241	3.06	1.06	7.91	<.01	68	28
		Final		3.63	1.13			36	15
	Second	Initial	214	3.19	1.16	9.26	<.01	58	27
		Final		3.79	1.02			24	11
	Third	Initial	233	2.78	.96	7.13	<.01	78	33
		Final		3.26	1.03			46	20
2. Relationships with Nursery School teachers	First	Initial	241	3.24	1.09	6.99	<.01	53	22
		Final		3.71	1.00			30	12
	Second	Initial	214	3.29	1.23	8.18	<.01	59	28
		Final		3.89	.98			19	9
	Third	Initial	233	2.89	.94	5.76	<.01	79	34
		Final		3.28	.99			47	20
3. Creative use of individual activities	First	Initial	241	3.38	1.00	10.51	<.01	39	16
		Final		4.09	.90			9	4
	Second	Initial	214	3.47	1.06	6.51	<.01	30	14
		Final		3.89	.99			12	6
	Third	Initial	233	3.20	.90	5.90	<.01	42	18
		Final		3.60	.84			19	8
4. Signs of behavioral immaturity	First	Initial	241	3.41	1.11	7.15	<.01	46	19
		Final		3.90	.93			16	7
	Second	Initial	214	3.25	1.16	6.08	<.01	62	29
		Final		3.74	1.09			30	14
	Third	Initial	233	3.01	1.10	6.38	<.01	70	30
		Final		3.45	.98			33	14
5. Signs of behavioral eccentricity	First	Initial	241	3.56	1.10	3.65	<.01	37	15
		Final		3.80	1.02			28	12
	Second	Initial	214	3.27	1.24	5.45	<.01	65	30
		Final		3.66	1.03			34	16
	Third	Initial	233	3.13	1.12	4.43	<.01	74	32
		Final		3.42	.92			32	14

*Deficiency was defined as a rating of "2" or less on each five-point scale with "5" designated as the positive end of each scale.

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GOALS. . .GAINS

The program's goal for each student identified as having emotional problems was an increase of at least one step on each five-point scale on which he initially received a rating of "2" or less. The results of the analyses showed the following:

Relationships with Peers

30% (204) of the students from all three program years were judged to be initially deficient on this scale.

- 36% (74) of the students gained one step
- 27% (56) of the students gained two steps
- 8% (16) of the students gained three or more steps.

Altogether, 72% of the students (N=146) met or exceeded the program's goal of a one-step increase in final ratings.

Relationships with Nursery School Teachers

28% (191) of the students from all three program years were rated as being initially deficient in their relationships with their teachers.

- 41% (78) of the students gained one step
- 26% (49) of the students gained two steps
- 10% (19) of the students gained three or more steps.

In sum, 76% of the students (N=146) met or exceeded the program's goal of a one-step gain in final ratings.

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Creative Use of Individual Activities

21% (111) of the students from all three program years were found to be initially deficient on this five-point scale.

- 43 students (39%) gained one step
- 34 students (31%) gained two steps
- 18 students (16%) gained three or more steps.

Altogether, 86% of the pupils (N=95) met or exceeded the program's goal set for them.

Signs of Behavioral Immaturity

25% (174) of the students were initially rated as showing many signs of behavioral immaturity:

- 40% (69) of the students gained one step
- 30% (52) of the students gained two steps
- 12% (21) of the students gained three or more steps.

In sum, 82% of the students (N=142) met or exceeded the goal set for them.

Signs of Behavioral Eccentricity

26% (176) of the students were initially judged to be showing many signs of behavioral eccentricity.

- 48% (84) of the students gained one step
- 22% (39) of the students gained two steps
- 6% (11) of the students gained three or more steps.

Altogether, 76% of the students (N=134) met or exceeded the program's goal of a one-step gain in final ratings.

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In general, more than 70% of those pupils judged by their teachers to be initially deficient on the five items of the Nursery School Adjustment Scale met or exceeded the criterion of a one-step gain in their final ratings. These pupils had improved sufficiently so that by the end of each project year 80% or more were rated as being average or above average on each of the five scales.

ASSESSMENT OF TEACHERS DURING THE KINDERGARTEN YEAR

RATING SCALE

Students identified as having emotional problems during the first two project years were followed up into kindergarten where they received ratings on the five items of the Adjustment Scale from their kindergarten teachers.

A summary of the results for these students at the three rating times (beginning and end of the Saturday School year and during the kindergarten year) is given in Table 5.

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Table 5

A Summary of Initial, Final and Kindergarten Teacher Ratings on Items of the Nursery and Kindergarten School Adjustment Scales for First and Second Year Pupils Identified as Having Emotional Problems During the PCEE Program Years

Item	Project Year		Mean*	Standard Deviation	t	p	Deficient N	Deficient %
1. Relationships with Peers	First	Initial	3.06	1.06			68	28
		Final	3.63	1.13	7.91	<.01	36	15
		Follow-up	3.86	.97	2.34	<.05	19	8
	Second	Initial	3.19	1.16			58	27
		Final	3.79	1.02	9.26	<.01	24	11
		Follow-up	3.81	1.01	<1	n.s.	17	10
2. Relationships with Teachers	First	Initial	3.24	1.09			53	22
		Final	3.71	1.00	6.99	<.01	30	12
		Follow-up	3.80	1.02	1.09	n.s.	20	8
	Second	Initial	3.29	1.23			59	28
		Final	3.89	.98	8.18	<.01	19	9
		Follow-up	3.95	1.00	<1	n.s.	14	8
3. Creative Use of Individual Activities	First	Initial	3.38	1.00			39	16
		Final	4.09	.90	10.51	<.01	9	4
		Follow-up	3.90	.92	-2.01	<.05	14	6
	Second	Initial	3.47	1.06			30	14
		Final	3.89	.99	6.51	<.01	12	6
		Follow-up	3.67	1.11	<-2.27	<.05	21	11
4. Signs of Behavioral Immaturity	First	Initial	3.41	1.11			46	19
		Final	3.90	.93	7.15	<.01	16	7
		Follow-up	3.92	1.06	<.1	n.s.	31	13
	Second	Initial	3.25	1.16			62	29
		Final	3.74	1.09	6.08	<.01	30	14
		Follow-up	4.07	1.03	15.46	<.01	14	8
5. Signs of Behavioral Eccentricity	First	Initial	3.56	1.10			37	15
		Final	3.80	1.02	3.65	<.01	28	12
		Follow-up	3.94	1.04	1.62	n.s.	24	10
	Second	Initial	3.27	1.24			65	30
		Final	3.66	1.03	5.45	<.01	34	16
		Follow-up	3.96	1.07	13.60	<.01	18	10

*It should be noted that the higher number represents the positive end of the continuum represented by each scale.

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SATURDAY SCHOOL AND KINDERGARTEN RATINGS COMPARED

It may be seen in Table 5 that at the end of each Saturday School year students identified as having emotional problems were rated by their Saturday School teachers as having improved relationships with both their peers and their teachers; being more creative in their use of individual activities; and, showing fewer signs of behavioral immaturity and eccentricity as compared with their initial ratings.

At the time of their kindergarten ratings, these pupils generally maintained the gains they had made upon exit from the program in the areas of relationships with teachers. In the area of relationships with peers, the first year pupils were rated somewhat higher by their kindergarten teachers than they had been at the end of the Saturday School Year. Second year pupils were rated more positively in their showing of signs of behavioral immaturity and eccentricity. In the area concerning creative use of individual activities, pupils from both project years were rated somewhat lower. These findings may be inferred from both the paired observation t-test results and the differences in the proportions of pupils judged to be deficient on these scales at the three rating times.

In summary, the vast majority of Saturday School students identified as having emotional problems improved in their ratings from beginning to end of each project year. In general, these improvements were maintained or increased in most areas, as judged by kindergarten teachers.

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4 PARENTS OF PUPILS WITH EMOTIONAL PROBLEMS

RATING SCALE

The parents of those pupils identified as having emotional problems (and who remained in the program the entire project year) were rated by their children's teachers on three five-point scales both at the beginning and end of each program year. The three traits on which they were rated were:

- awareness of child's needs
- quality of motivation
- quality of reinforcement

A summary of the initial and final ratings on the three scales for parents of students identified as having emotional problems are given in Table 6.

PRE AND POST RATINGS COMPARED

As can be seen in Table 6, these parents were rated as:

- being more aware of their children's needs
- using more positive motivation techniques
- using more positive reinforcement techniques

at the end of each program year than they were at the beginning of each year.

These findings may be inferred from both the statistically significant differences between initial and final means and the decreasing proportions of parents found to be deficient in these traits at the end of each program year as contrasted with the beginning of the year ratings.

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Table 6

A Summary of Initial and Final Teacher Ratings of Parents' Interaction with Those Pupils Who Have Been Identified as Having Emotional Problems

Rating Scale	Project Year	N		Mean	Standard Deviation	t	p	Deficient* N	Deficient* %
Aware vs. Unaware of Childs' Needs	First	225	Initial	3.28	1.03	10.07	<.01	50	22
			Final	4.06	.90			7	3
	Second	210	Initial	3.88	1.15	5.31	<.01	31	15
			Final	4.30	.90			10	5
	Third	218	Initial	3.83	1.16	4.71	<.01	31	14
			Final	4.18	.90			9	4
Positive vs. Negative Motivation	First	225	Initial	3.48	1.00	10.11	<.01	30	13
			Final	4.20	.81			5	2
	Second	210	Initial	4.07	1.02	4.81	<.01	14	7
			Final	4.40	.84			8	4
	Third	218	Initial	4.01	1.03	4.78	<.01	19	9
			Final	4.36	.88			6	3
Positive vs. Negative Reinforcement	First	225	Initial	3.44	1.00	10.75	<.01	30	13
			Final	4.21	.80			4	2
	Second	210	Initial	4.09	1.03	4.51	<.01	15	7
			Final	4.40	.85			9	4
	Third	218	Initial	4.03	1.01	4.52	<.01	18	8
			Final	4.36	.88			6	3

*Deficiency was defined as a rating of "2" or less on each five-point scale.

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GOALS. . .GAINS

The program's goal for each parent was a one-step gain in final ratings for those parents initially judged to be deficient (rated as "2" or less) on each of the five-point scales. The results of the analyses showed the following:

Aware vs. Unaware of Child's Needs

17% (112) of the parents from all three program years were judged to be initially deficient on this five-point scale:

- 29% (33) of the parents gained one step
- 36% (40) of the parents gained two steps
- 25% (28) of the parents gained three or more steps.

Altogether, 90% of the parents (N=101) met or exceeded the program's goal of a one-step increase in final ratings.

Positive vs. Negative Motivation

10% (63) of the parents were initially rated as being deficient on this five-point scale:

- 24% (15) of the parents gained one step
- 37% (23) gained two steps.
- 27% (17) of the parents gained three or more steps.

In sum, 87% of the parents (N=55) met or exceeded the program goal set for them.

Positive vs. Negative Reinforcement

10% (63) of the parents were initially rated as being deficient on this scale.

- 22% (14) of the parents gained one step
- 37% (23) of the parents gained two steps
- 30% (19) of the parents gained three or more steps.

In total, 89% of the parents (N=56) met or exceeded the program's goal of a one-step increase in final ratings.

In general, between 71% and 98% of the parents who were found to be initially deficient in their modes of interacting with their children met or exceeded the program goal of a one-step gain in their final ratings. The criterion was attained most completely during the first program year, where the greatest proportions of parents were judged to be initially deficient.

At the end of all three program years, less than 6% of the parents were found to be deficient on any of the scales. *In other words, more than 94% of the parents of emotionally handicapped students were judged to be interacting appropriately with their children by the end of each program year.*

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A SUMMARY OF EVALUATION RESULTS:

The Saturday School Program has apparently had a considerable impact upon the major target groups it has identified and provided with special programing. These groups include:

- pupils with learning disabilities
- pupils with low intellectual functioning
- pupils with emotional problems
- parents of pupils with emotional problems

The highlights of the findings are:

Students with Learning Disabilities

- Students, as a group, improved significantly on every test given to them during all program years.
- The vast majority of students gained eight or more months in mental, language, and perceptual age during the six months between test administration.

Students with Low Intellectual Functioning

- These students, as a group, improved significantly on all tests given to them during all program years.
- As a group, they gained an average of 10 months of mental and social age during the six months between test administrations.

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Students with Emotional Problems

- These students, as a group, improved significantly on nearly all scales used by parents in rating their children.
- The students improved significantly on all scales used by teachers for rating the pupils during the Saturday School year.
- The gains made by these pupils were maintained or improved in nearly all instances, according to their kindergarten teachers.

Parents of Pupils with Emotional Problems

- This target group was rated by Saturday School teachers as significantly improving their interactions with their children.
- More than 94% of these parents were judged to be interacting appropriately with their children by the end of each year of program operation.

In sum, it may be safely concluded that the Saturday School Program has had a significant impact upon the students identified as having some kind of problem affecting their learning, as well as on the parents of emotionally disturbed students.